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Title of presentation: Certification in the Electronics Recycling Industry

Eric (Harris, of the Institute of Scrap Recycling Industries) and I have shared the podium numerous times on this subject. I think both organizations are very much in favor of establishing a certification program. ISRI and IAER probably agree on more parts of the program than most other people in the certification process. I think we just both have kind of a different path of getting there.

If there's two words you take out of a certification program, you should remember is "continual improvement." The basis of all certification programs is to continuously improve your operation, and two years down the road when you go back to get recertified, that is the documentation that they will ask to see. So the certification's objectives are to support, promote high standards for industry, environmental quality, regulatory compliance, high quality business practices. The established formal, objective, certification processes, and give someone the designation of a certified electronics recycler. The idea is to provide the service to the member companies. So you see, there are some similarities between the two programs.

Here's the program development. This certification process has been developed, tested, and been refined. The IAER developed the process and shared it with the industry. A number of companies have gone through the process, and many more are in the process of obtaining certification, we'll talk about that later. I personally became involved in this because my company, the first time we went for certification, we failed. We thought it was an environmental audit. Wrong. After having done such a good job the first time around, at some point, I ended up being the chairman of the certification committee, and I can say that everyone on that committee has worked very hard to put this program together.

Service provider is very important, I believe that ISRI uses ANAB, which is a very fine organization. We will look to member recommendations, leaders in the environmental health and safety industry, and we've got to, we're fortunate to be able to choose between some of the best companies in the field. We selected BVQI, a recognized world class auditor for EH&S quality, they have 12,000 auditors worldwide, they are recognized by 17 accreditation bodies, and they have issued 27,000 certificates in 70 countries. The other thing we were trying to do was get to industry specific requirements and the broader needs of the customers who were using electronics recyclers. Although it is broad in scope, it was designed to be practical. Once again, like the ISRI program, it does take parts of ISO 14000, 9001, looks at general business practices, health and safety management, operating capabilities, and while it isn't a complete ISO accreditation, you are accredited to parts of the ISO standard. The approach was to focus on improving management systems, not evaluating operational performance, and it is not a substitute for registration to ISO standards, but I believe that the recognized third party auditor is of primary importance in the program. General scope is tailored to recycling, electronics recycling companies, some have unique

criteria, some have generic criteria. The scope of IAER certification addresses three major aspects: management systems, general business factors, operation capabilities, and processes.

Here are some examples (on slide) from our standards. Corporate commitment is a keyword. You must be able to demonstrate a security program, and you must be able to make information available on contracted programs, oftentimes referred to as downstream recyclers. Now where do you send the material, what do they do with it? Evidence of compliance with all applicable health and safety regulations. It's got to be a cornerstone of the program. IAER certified companies must demonstrate that they have insurance in the proper amounts and types to be in the business. One of those types of insurance required is environmental insurance, and it's one that most often, people forget to ask about. It also addresses, once again, making sure that you know that what your downstream vendors are doing with the material. It's a five step process, it minimizes onsite time, the onsite audit is critical, but not the only one of the elements that has to be met. Certification must be repeated every two years. Certification readiness is done by our group with a pre-audit questionnaire, where a member of the IAER sits down with a potential candidate and helps him evaluate, if he's got the materials, the policies, etc, that are important to be able to pass the audit. If it's not ready to do the audit, we will help them prepare to do the audit.

Fundamental questions, these are the four basic questions that you get asked during the audit. Management systems that address key elements of the environment: health safety and quality, does the company exhibit the basic characteristics of a reputable business, does the company have the operational capabilities that are consistent with what it claims to be the scope of the business, does the company have adequate controls in place to protect its workers, customers, and the environment? When you go through the audit, these are the areas that they'll focus on, and they're pretty much a reflection of the four basics that I mentioned earlier. By the way, you'll notice some of this is not addressed as part of the ISO certification process. By the way, any of these documents, if you care to review them, are on the IAER website. Challenges, there are several of us in the room that are aware of the challenges of trying to develop best management practices and certification programs. By the way, the terms are not interchangeable.

I think that all of us would be remiss that are from the United States if we didn't recognize the efforts of EPA to facilitate the development of best management practices for this industry, I think they've done a heck of a job, and I think that they brought some of their people to the top that showed us how good some of these people are that work for the government, and we sincerely appreciate their efforts. I think that the best management practices and certification is a moving document, I think it's going to be a period of time before it's universally accepted. Obviously, our organization is intent upon increasing the number of certified companies in this business, it is our purpose to raise the bar so that some guy on the corner can't go into the business, whereas this lady over here pointed out that some people working in a dump with no safety equipment and under very poor conditions would be considered electronic recyclers. Interest in certified recyclers is increasing. Maybe ought to get the right page. This is, just a few comments on the EPA effort to get best management practices, seems like it's been more than a two year effort. It has been professionally done, and they're all, I look around the room at some of us that sat through some of these meetings, the input and the ability to listen to all sides of the issue by the facilitator hired by EPA, that man

should go to heaven, I'll tell you that, and he has funneled the discussion back to where it belongs, and it's been a very good process. I think one of the things that it did for IAER and ISRI is pointed out to both organizations the need that, you've got to work together to get something like this done. We both have been a part of these processes, we continue to plan to participate in the future in this process, and I could go on with some more of the details of what you have to do with the IAER certification process, but I think if you go to the website, it's a lot easier than you trying to remember me telling you here what you needed to do.

Here's kind of a summary: Certification is market driven. There are certifications for different needs. Organizations focused on management processes, organization discipline and control are key, preparation is critical, the electronics recycling industry needs to promote best practices. So once again, remember the two words: continual improvement, and that's really what we talk about when we talk about certification. Thank you.

[applause]

There is the website if anyone wants to write it down. Any questions?

[Mike Vanderpol]
Hi, Mike Vanderpol, Environment Canada again. It's interesting you raise the issue of being transparent with respect to your selection of sub-vendors and subcontractors under the certification program. Understanding that, to many industry organizations, this information is considered to be proprietary by nature, can you comment, perhaps, on the experience of your industry association obtaining that kind of information, for example, is that obtained under some kind of confidentiality agreement during the auditing process, and is it a feasible expectation for government organizations, for municipalities, for businesses, to expect that that same level of transparency from a recycling association, that is, wanting to know exactly who those subvendors and subcontractors are to ensure environmentally sound management?

[John Chilcott]
Well, I think all associations, and I can't speak for ISRI, unless you want me to try to, well I am a member, so…I think that we all want to be transparent because of the regulatory nature of some of the businesses a lot of us are in before the electronics recycling became so popular. Our particular company started out recycling light bulbs and PCB lamp valves, and in the United States, that was a pretty regulated business. You were subject to business by government regulators at any time, so a lot of us in that business just adopted the attitude that, if regulators were going to come see us, and we'd been working with regulators on our processes that we could have them marked proprietary, but then all of the sudden, people like Bank of America, Wal-Mart, Boeing Aerospace teams, businesses, all came in doing their due diligence and demanded to see the information that you had audited, your downstream providers, and we just made a decision that we didn't see anything in there that was confidential, but it did demonstrate that we were doing the right thing, and therefore, on our website, it's posted right on the website. Now every company has a different way of running their business, but in the secondary metals market, people like ISRI can tell you who's good, who's bad, you can go out and visit facilities, and if I were a generator, and particularly a sizeable generator, I'd go have my own environmental person visit the facilities.

[Speaker] I'd just add to that that you put your finger on the tension, that we all recognize there are some egregious behaviors going on in some developing countries, and it's sometimes very bad, you have open pit burning, you have direct discharge into water sources, which is unacceptable, and we certainly advocate for responsible recycling, but we also know that these materials must move across borders, so we're looking for some flexibility and some innovation by way of international regimes, how countries communicate with each other, on how these materials can flow. But you're absolutely right. At some point, you run headlong into a confidential business information issue. But that doesn't mean that all hope is lost. There are opportunities, we're wrestling through that, what's enough information, what's not enough information? And more importantly, how do you correct behavior when things go bad, so I would say stay tuned on that very issue.

[Rick Picardi]
Anyone else? Yes.

[**Audience]**
Voy a subir el micrófono para no tener que mover aquí.
Quisiera preguntar; primero quiero felicitarles precisamente por el nivel que han adquirido ustedes en Estados Unidos y Canadá en materia de reciclados. Yo le quería hacer un cuestionamiento: en México decimos; ¿que qué estuvo antes el huevo o la gallina? ¿En Estados Unidos qué estuvo antes, el reciclaje, el reciclar o las leyes? Primero, ¿quién dio el primer paso? ¿La gente que estaba preocupada por el medio ambiente, y luego se reglamentó o primero se reglamentó y en base a ese reglamento se generaron las empresas recicladoras?

[John Chilcott]
I would certainly say that, in my opinion, that the need for economic prosperity came first, and environmental protection, health and safety protection, is expensive. There's a cost associated with it. And it can have an impact on your bottom line.

[Eric Harris]
I would give you pretty much the same answer. On the mercury light bulb side of the business, the regulation came after the people who were throwing large amounts of this material into landfills or into areas where it shouldn't go. I worked in the mining industry when I was in college, so my father could give me the message that you ought to hurry up and graduate. By the way, it was a very good message, I graduated in a hurry. They actually were running cyanide down the water sources in the town I lived in, so there was a lot of environmental bad things going on that eventually, people came to their senses and said if we're going to leave this world a better place for our children, we'd better start doing something about it. Light bulbs became regulated in the United States, because they changed the testing from the EP tox test to TCLP, and light bulbs routinely failed it, and all of the sudden an industry was born. Now, in the United States, there's probably the 700 million light bulbs that are generated every year. The recycling rate's probably up around 30%. 10 years prior to that, it was probably zero.

[John Chilcott]
And I just want to add, if you look at, historically, in the United States, some of the big environmental regimes, Clean Air Act, Clean Water Act, the Resource Conservation

Recovery Act, or RCRA that Bob and others have spoken about, climate change is the issue now, all came after things have gotten really bad: rivers were catching on fire, hazardous wastes were being dumped openly in water supplies and streams, our climate is warming at an alarming rate, most people would say. I would tend to agree with that myself. But the question is, does Mexico, from a policy perspective, want things to get that bad before they start taking steps towards making things better? And the question is, can you grow in a more sustainable way, where you're making money, but you're eliminating open pit burning and direct discharge into your water stream, and the big environmental egregious behavior we're trying to avoid.

[Audience]
Sí, le entiendo lo que está comentando. De alguna forma, el comentario mío iba dirigido a qué estuvo antes, ¿el huevo o la gallina? La gente que quiere reciclar se apega a la normatividad, y ya no puede reciclar porque las inversiones son archimillonarias. Entonces a nivel de México cualquier proyecto que se realice, se pretenda realizar en base al reciclado, y en este caso en particular a la electrónica; cuando uno se acerca a las autoridades lo primero que piden es cuánta inversión vas a hacer para hacer el reciclado. Si ahorita estamos en nivel cero de eficacia, como comentabas, que están las computadoras en las barrancas o están en los tiraderos procesándose de una manera no real o bien..., el que esté antes la gallina como el huevo, como le comentaba antes; ¿qué tanto nos tenemos que arriesgar los recicladores en contra de las leyes para sacar adelante el reciclado y que a medida de que el mismo negocio dando ese capital se pueda seguir invirtiendo en la misma empresa?

[John Chilcott]
Regarding the chicken and egg, it depends on what materials you're speaking of. The lesser value more hazardous materials, it may take regulation to get collected and recycled, controlled appropriately, and more valuable materials, that's happening before the regulations, okay, in the United States, circuit boards, and the harvesting of chips from scrap electronics, from manufacturing scraps, then going back 25 years, okay, long before regulation and that sort of thing, and the same is happening in Mexico, undoubtedly. There is harvesting of materials, okay, there is some dismantling of the more valuable things. Unfortunately, the less valuable things probably are getting dumped, and this is getting done in the informal setting. There is harvesting of informal materials, there is some dismantling, but the more valuable things, but unfortunately, the less valuable things are probably getting dumped, and this is getting done in the informal center, and Mexico is common to many developing and economies in transition, so it depends on what we're talking about. There is recycling clearly going on, okay, it's talked about in the informal center in particular, and the challenge for companies such as yours is how to move it from a more informal practices to a more formal ones that are done, ultimately, in accordance with the kinds of things that we've been talking about in the certification programs.

[Eric Harris]
I would only add that, don't break the laws, okay, the rule of law is important, and some changes may need to be made to the laws. One of the best things you could do is treat this material as a commodity, as a potential product, not a waste. Scrap material is not waste. Disposal is not recycling. It's a policy package of concept, how you go about it, and I would suggest that there a number of opportunities, and I don't want to get ahead of tomorrows, because we're going to talk about some of these things, but there are a

number of inserts into the recycling chain, and so one of the challenges is to find out where your business fits into that, whether you want to manually dismantle, or mechanically process, or what type of relationships you have with businesses and strategic partners and so forth. So I think there are opportunities, and I would reject the concept that the only way to make money would be to violate the current laws. I don't think that's the right answer.